

INTERNATIONAL SEARCH REPORT

International application No.

	PCT/JP03/09507
A. CLASSIFICATION OF SUBJECT MATTER	
Int.Cl ⁷ G11B7/005, 7/125, 11/105	
According to International Patent Classification (IPC) or to both national classification and IPC	
B. FIELDS SEARCHED	
Minimum documentation searched (classification system followed by classification symbols)	
Int.Cl' G11B7/00-7/013, 7/12-7/22, 7/30, 11/00-11/105	
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched	
Kokai Jitsuyo Shinan Koho 1971—2003	Toroku Jitsuyo Shinan Koho 1994-2003 Jitsuyo Shinan Toroku Koho 1996-2003
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)	
C. DOCUMENTS CONSIDERED TO BE RELEVANT	
Category* Citation of document, with indication, where ap	oppropriate, of the relevant passages Relevant to claim No.
X JP 8-221760 A (Fujitsu Ltd.)	, 1-4
30 August, 1996 (30.08.96),	T4
Full text	
& US 5617400 A	
X JP 11-053781 A (Sharp Corp.)	, 1-4
26 February, 1999 (26.02.99),	,
Full text, & EP 896326 A2 & US	6222270 P1
α EF 030320 A2 α US	6392970 B1
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Further documents are listed in the continuation of Box C.	See patent family annex.
* Special categories of cited documents:	"I" later document published after the international filing date or
"A" document defining the general state of the art which is not	priority date and not in conflict with the application but cited to
considered to be of particular relevance "E" earlier document but published on or after the international filing	understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be
date	considered novel or cannot be considered to involve an inventive
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other	step when the document is taken alone
special reason (as specified)	considered to involve an inventive step when the document is
"O" document referring to an oral disclosure, use, exhibition or other means	combined with one or more other such documents, such
"P" document published prior to the international filing date but later	combination being obvious to a person skilled in the art document member of the same patent family
than the priority date claimed	
Date of the actual completion of the international search	Date of mailing of the international search report
21 August, 2003 (21.08.03)	02 September, 2003 (02.09.03)
Name and mailing address of the ISA/	Authorized officer
Japanese Patent Office	
Facsimile No.	Telephone No.

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